

PARTNERSHIP FOR GROWTH:

CONNECTICUT'S ECONOMIC COMPETITIVENESS STRATEGY

AT A GLANCE

This report underscores a unique opportunity to improve the State's long-term competitive position.

Implementing these initial recommendations will enhance the ability of Connecticut's businesses and citizens to compete more effectively as we enter the 21st century.

Industry Clusters will help pave Connecticut's road to economic prosperity, and put in motion a force that will improve the quality of life for all our residents for years to come.



**REPORT BY
CONNECTICUT'S INDUSTRY
CLUSTER ADVISORY BOARDS**

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CALL TO ACTION

In 1997, Governor Rowland recruited senior executives from large and small companies throughout Connecticut to form five Industry Cluster Advisory Boards:

- ▶ Financial Services
 - ▶ Telecommunications & Information
 - ▶ Health Care Services
 - ▶ Manufacturing
 - ▶ High Technology
- (Tourism had already been established)

THE GOVERNOR CHARGED THESE ADVISORY BOARDS WITH TWO TASKS:

1. Develop specific recommendations to sharply improve the ability of Connecticut companies and citizens to compete in the global markets; and,
2. Determine whether a high-powered industry cluster initiative should be launched in Connecticut

The *Partnership for Growth* report is the cluster advisory boards' response. *At A Glance* is a summary of that report.

CONNECTICUT'S ECONOMY: PROGRESS AND CHALLENGES

Connecticut's economy continues its recent rebound with expanding employment, high income, increased output, and rising levels of business and consumer confidence. Now in the midst of a five-year upward trend following the severe downturn suffered during the 1989 - 1992 recession, the State's expansion is anticipated to continue.

Connecticut's economy is far more diversified than it was 30 years ago. As the State approaches the 21st century, both its established and emerging industries are flourishing.

At the same time, the revitalization of State

government is well underway, and is becoming more responsive to both the needs of Connecticut's businesses and our residents.

These are exemplified by lower tax rates, increased investments in education and training, reform of the welfare system, a State budget surplus, and major state agency restructuring.

RISK FACTORS IN THE STATUS QUO

While poised for continued growth, significant risk factors exist that threaten future prosperity, particularly if Connecticut is faced with a cyclical downturn in the economy. The most obvious danger areas are:

- ▶ Skilled labor shortages, particularly in high technology and manufacturing
- ▶ Population growth lagging and age increasing
- ▶ Insufficient pool of math, science, and engineering graduates
- ▶ Major urban problems remain
- ▶ High reliance on success of financial markets
- ▶ Lower rate of start-up company growth
- ▶ Physical infrastructure aging
- ▶ "Business-friendly" image still lagging

FOCUS ON COMPETITIVENESS

The industry cluster model of economic development provides Connecticut with the best chance of managing its economic future. It focuses the State's leadership on the central issues of competitiveness — increased productivity and innovation. Simultaneously, it requires new levels of collaboration between competing businesses and between business, education, government and labor. These are what make industry clusters such a powerful tool.

CLUSTER POWER

CLUSTER OVERVIEW

Here is a very brief overview of the cluster concept:

- ▶ A cluster is a group of industries that create products and services related by a common technology, market or need, and the firms that support these businesses.
- ▶ Experience has shown that identifying and nurturing key industry clusters in a given geographic area is a powerful tool for improving the competitiveness of the businesses within the clusters.
- ▶ When key clusters become more competitive in the global economy, the regional economy prospers, and residents enjoy a higher quality of life.
- ▶ The people best equipped to determine what clusters need to flourish are those who lead the businesses, large and small, that comprise the cluster.

For cluster-based economic development to succeed:

- ▶ Firms within a cluster must cooperate to identify problems and generate solutions; and
- ▶ Government, academia, and regional/local organizations in economic development must become full partners within the cluster and work toward common goals.

VALUE TO BUSINESS

Market experience in other states and from around the world has demonstrated that the interdependencies inherent in industry clusters prove to be a distinct competitive advantage. Specifically, an industry cluster creates:

- ▶ Greater number of and access to an industry-specific skilled workforce
- ▶ More up-to-date market/customer intelligence
- ▶ Earlier awareness of new products being developed
- ▶ Quicker diffusion of new technologies and processing techniques

- ▶ Highly specialized suppliers in close geographic proximity
- ▶ Greater industry expertise among financial institutions
- ▶ Larger, cluster-focused investments by government and educational institutions in specialized “economic foundations” and infrastructure

VALUE TO INDIVIDUALS

When an industry cluster begins to grow, individuals and geographic regions benefit greatly. Specifically, the result is:

- ▶ Increasing number of value-added, higher paying jobs
- ▶ Greater job security and options because the region becomes less dependent upon one industry
- ▶ Educational and training systems become more relevant and effective
- ▶ Opportunity and motivation increases to establish new, start-up businesses
- ▶ Local companies benefit from increased purchasing in the area
- ▶ More R&D investments are made in conjunction with local universities and research hospitals

CONNECTICUT CAN COMPETE — INDUSTRY CLUSTERS ARE THE KEY

A growing number of nations, states, regions and cities have successfully introduced industry cluster initiatives. In the United States these include Arizona, Florida, Maryland, Massachusetts, North Carolina, Oregon, and Silicon Valley. Their choice to implement broad-scale cluster initiatives has been based upon the recognition that traditional economic development efforts, will not, by themselves, have a sufficient nor timely enough impact on strengthening the region's ability to compete globally.

Connecticut has more than sufficient business, education, workforce, and infrastructure to compete with these and other areas of the world. However, at this point in time, it will require the State's private and public-sector leaders to agree to move in concert to sharply improve the business environment.

1998/1999 PRIORITY INITIATIVES

THE CHALLENGE OF COLLABORATION

Experience has shown that activating successful industry clusters is a challenging task.

Many businesses and public sector leaders do not yet fully understand that industry clusters provide a competitive advantage. Similarly, there is natural skepticism to claims that this collaborative process of identifying common problems and opportunities will speed up the elimination of constraints and impediments to increasing productivity and innovation.

STRONG, VISIONARY LEADERSHIP IS NEEDED

In order to create a broad-scale commitment to collaborate and overcome the concerns of private sector, government agency, and educational leaders, the Governor and legislators must exhibit strong, visionary leadership. This must be matched by the commitment of the many executives participating on the industry cluster advisory boards to rally their associates in support of this cluster initiative.

GUIDING PRINCIPLES

There are a series of guiding principles that have helped shape and focus the recommendations. These are:

- ▶ Business leadership must be willing to take primary responsibility for the cluster initiative
- ▶ Bipartisan support is required, as well as a commitment that transcends the political calendar
- ▶ Medium and small companies must be a priority
- ▶ Re-igniting Connecticut's entrepreneurial energy is essential
- ▶ The State should not try to choose "winners and losers"

- ▶ Extensive collaboration is required
- ▶ Regional and local cluster activities are essential and should be reinforced
- ▶ Widespread understanding of the dynamics of global competitiveness

will help increase the pace of change required

- ▶ Reallocate existing resources whenever possible to fund cluster initiative

RECOMMENDATIONS AN OVERVIEW

1. GOVERNOR'S COUNCIL ON ECONOMIC COMPETITIVENESS AND TECHNOLOGY

Connecticut's launch of industry cluster-driven economic development requires a bold expansion from traditional approaches, and prominent and energetic leadership. Consequently, the Governor's Council on Economic Competitiveness and Technology should be established. Co-chaired by the Governor and a business leader, it will consist of business executives from large and small companies, as well as education, legislative, labor, association, and regional cluster board leaders.

The Council will advise on policy matters relating to the development of industry clusters, the responsiveness of government agencies, and the continuing impediments to competitiveness in Connecticut.

2. CREATE INDUSTRY CLUSTERS

Industry clusters will drive the success of regional economies. Consequently, to have an impact, existing industry clusters must be formalized and reshaped to become effective, operating groups. At the same time, the creation of new clusters should be actively encouraged.

Specifically, executives from the five clusters which have been part of the 1997 advisory boards should be supported in their efforts to formalize their clusters, as well as establish sub-clusters where appropriate (i.e., Manufacturing; Financial Services; Telecommunications & Information; Health Care Services; and High Technology). Developing sub-clusters like Medical Devices, Plastics, Photonics, Software/Information Technology, and Biotechnology, among others, should be encouraged. Also, Tourism, already a successful cluster, deserves continued support as it continues to evolve.

Seed funds required: Ultimately, industry cluster organizations must be self-funding, based upon the benefits derived by the participating companies. However, experience in other successful states has shown it takes 2-3 years to generate enough participation for new clusters to become self-sufficient. Consequently, seed funds are necessary to leverage private sector commitments.

Legislation is needed to allow the Department of Economic and Community Development to reallocate Manufacturing Assistance Act (MAA) funds for this purpose.

3. BIOTECHNOLOGY CLUSTER

The Biotechnology Cluster is the first example of a high-tech cluster that has formed, clearly identified the constraints of doing business in Connecticut, and proposed specific recommendations to sharply improve the situation. If these recommendations are enacted, Connecticut will become a national force in biotechnology. Fortunately, these recommendations can be funded largely through Connecticut Innovations' existing resources and authorizations. The recommendations are:

- ▶ Create new laboratory and incubator space for new and developing biotechnology companies by establishing a special "facilities" loan or loan support fund totaling \$30 million
- ▶ Improve tax incentives for biotechnology firms by allowing smaller companies to get the full 6% R&D credits, and permit them to sell their tax credits
- ▶ Establish a \$6-10 million seed fund for new biotechnology companies
- ▶ Create a biotechnology center in Connecticut

4. WORKFORCE DEVELOPMENT

There is widespread agreement that:

- ▶ Connecticut must have a highly qualified workforce in order to compete and grow;
- ▶ A critical need exists to continuously raise employee skill levels; and,
- ▶ The increasingly technology-dominated marketplace requires employees with a broad range of skills, as well as comfort in science, math, technology and communications

To be successful, Connecticut's workforce development efforts must be shifted from a "supply" side to a "demand" driven system, heavily influenced by actual business needs.

The workforce recommendations fall into two categories — General and Manufacturing:

General

- ▶ Establish cluster-based networks for training and education to clearly define the clusters training and education needs, as well as gain the

clear commitment from businesses to help shape the curriculum and provide jobs for qualified "graduates"

- ▶ Launch a high-powered, technology-focused promotion campaign directed at all educational levels, to raise students' awareness and motivation regarding high-tech job opportunities
- ▶ Study the creation of "Workforce Learning Inc.," to consider whether a quasi-public organization should be established to meet industry cluster training needs

Manufacturing

- ▶ Improve vocational-technical school manufacturing training by establishing pilot programs in two schools, with extensive industry cluster involvement in creating a strong curriculum, company exposure, a closer link to the local public high school, and a positive social environment
- ▶ Provide support for regional precision manufacturing training by funding the precision machining training program being developed by the Greater Hartford area's Community-Technical Colleges and the Capital Region Growth Council's Millennium Project

5. CREATE A MANUFACTURING RESOURCE CENTER

The goal of the Manufacturing Resource Center is to help smaller manufacturers improve their productivity and competitiveness.

This will be accomplished by aggressively promoting the opportunities and need to change, and by helping smaller manufacturers learn about and implement newer and better factory processes. Specifically, technical assistance will be provided in such areas as "lean manufacturing" and the use of computer technology.

The Manufacturing Resource Center should be established by enhancing the current Connecticut Technology Extension Program (CONN/STEP). Their board of directors will be enhanced by the addition of industry cluster advisory board members.

6. TRANSPORTATION INFRASTRUCTURE

Transportation infrastructure plays a major role in Connecticut's global competitiveness for all business sectors. Overall, the existing infrastructure in the State is in good repair due to the extensive investment made over the past 10 years. However, there are significant challenges and opportunities ahead; these have led to the following recommendations:

BRADLEY INTERNATIONAL AIRPORT

A comprehensive and aggressive program to allow Bradley to achieve its potential is necessary to retain its current viability and leverage future expansion opportunities. Consequently,

- ▶ Rapidly assess the opportunities available for private-sector management of selected Airport functions
- ▶ Explore potential for master planning and development of publicly and privately owned land near the Airport
- ▶ Support the work of the Bradley Development League and Millennium Project to make the Perishables Center a reality

IMPORTANT OTHER TRANSPORTATION OPPORTUNITIES

- ▶ Support the Coastal Corridor Coalition recommendations to reduce peak-hour traffic by 5% in the I-95/Merritt Parkway corridor
- ▶ Actively consider the expansion of Tweed New Haven Airport to tap into the enormous number of business travelers in Southern Connecticut
- ▶ Capitalize on the Northeast Corridor high-speed rail passenger service, scheduled to commence by the year 2000
- ▶ Expand the transportation Welfare to Work job access programs, linking low-income residents with better jobs and training opportunities

7. REGULATORY ENVIRONMENT

While good progress is being made, Connecticut must continue to bring about improvements in its regulatory processes to be considered one of the premier states in the nation that embraces competitive business growth and retention. Recommendations to help accomplish this are:

- Improve licensing and permitting processes by implementing the High-Efficiency Licensing Program (HELP)
- Raise the CON capital investment threshold from \$1 million to \$2.5 million, and study the issue of expanding or reducing current applicability
- Create industry cluster technical assistance centers in each state agency responsible for regulatory guidance
- Compare Connecticut's regulatory requirements with those of key regional competitive states, re: how they deal with the differences in federal and state laws
- Continue to re-engineer State agency operations to adopt communications and training that emphasize compliance assistance, rather than a penalty-oriented, adversarial approach

8. CAPITAL & INCENTIVES

For Connecticut and its residents to achieve sustainable economic growth, those enterprises that will be the engines of our future must have access to capital. Since the principal source of job growth will continue to be smaller companies, more focus should be given to putting them on an equal footing with large companies. The Tax Incentives and Capital Formation recommendations deal with this and other issues:

TAX INCENTIVES

- Improve the annual R&D tax credit by permitting all eligible businesses, including fast-growing emerging companies, to utilize the same tax credit rate (6%) now available to a few large companies

- Modify tax credit and tax loss carry-forward provisions to make them meaningful for companies that require years of investment before achieving taxable income
- Encourage Connecticut businesses to create jobs by providing a tax credit for each new job created, net of any jobs lost
- Benchmark tax incentives against other Northeast states actively fostering economic growth
- Support urban area growth by providing greater tax incentives

CAPITAL FORMATION

- Encourage further investments into Connecticut companies by making transferable tax credits available to investors
- Stimulate the formation of venture funds for Connecticut businesses by broadening the tax credit applicability of the Insurance Re-investment Program to other industries

9. URBAN DEVELOPMENT

A successful urban competitiveness initiative must help transform cities into vibrant locations in which firms can have a competitive advantage in the global market. Cities must draw on the inherent strengths of their economies, populations and infrastructure to become vital parts of the regional economy. To reinforce the existing major urban initiatives already underway, the following recommendations are made:

- Establish an Urban Development Advisory Board as an advisory group to the Governor's Council, to help cities and their residents link to the industry clusters
- Identify and expand business-driven urban education programs that improve academic performance and employment skills, like the technology and finance academies sponsored by UTC and Travelers
- Increase effectiveness of urban entrepreneurial activity by assessing existing financing and technical assistance programs, and expanding training of existing women- and minority-owned businesses

- Benchmark urban tax incentives with key competitive states to ensure best practices are used in Connecticut

10. MARKETING

An integral part of improving the environment for growth in Connecticut is marketing the state more aggressively and more consistently. Two areas of immediate concern are the need to build a more attractive business image, and the ability to provide highly personal, professional assistance to companies considering moving to or expanding in Connecticut. The recommendations are:

IMAGE AND PROMOTION: Design a comprehensive multi-media campaign which promotes a consistent, vibrant, and compelling image of Connecticut's competitive strengths.

RAPID RESPONSE TEAM: Create a rapid response team made up of senior state officials to respond more quickly and effectively to inquiries from businesses considering locating and expanding in Connecticut.

11. PERFORMANCE MEASUREMENT

It is essential to track Connecticut's progress toward becoming a more competitive location to do business, to get a good job and to enjoy a high quality of life. Job numbers alone do not provide sufficient information to allow leaders to anticipate or effectively respond to the fast-paced changes occurring in the global economy. Consequently, the recommendations are to:

- Establish the "Connecticut Index," a new performance measurement system that can be widely understood and is agreed upon by key decision makers
- "Economic Vitality" and "Economic Opportunity" quantitative indicators should be selected to judge (1) the improvement in business competitiveness, innovation and productivity, and, (2) the success individuals are having in matching the business opportunities or preparing to do so.